

NAVAL AVIATION ENTERPRISE

Warfighting partners working together to efficiently deliver the right force with the right readiness at the right time.

**HQMC
ASL**



Naval Aviation Enterprise (NAE)

&

Current Readiness (CR)

***Overview
(MAG CO)***





PART I





Strategic Landscape

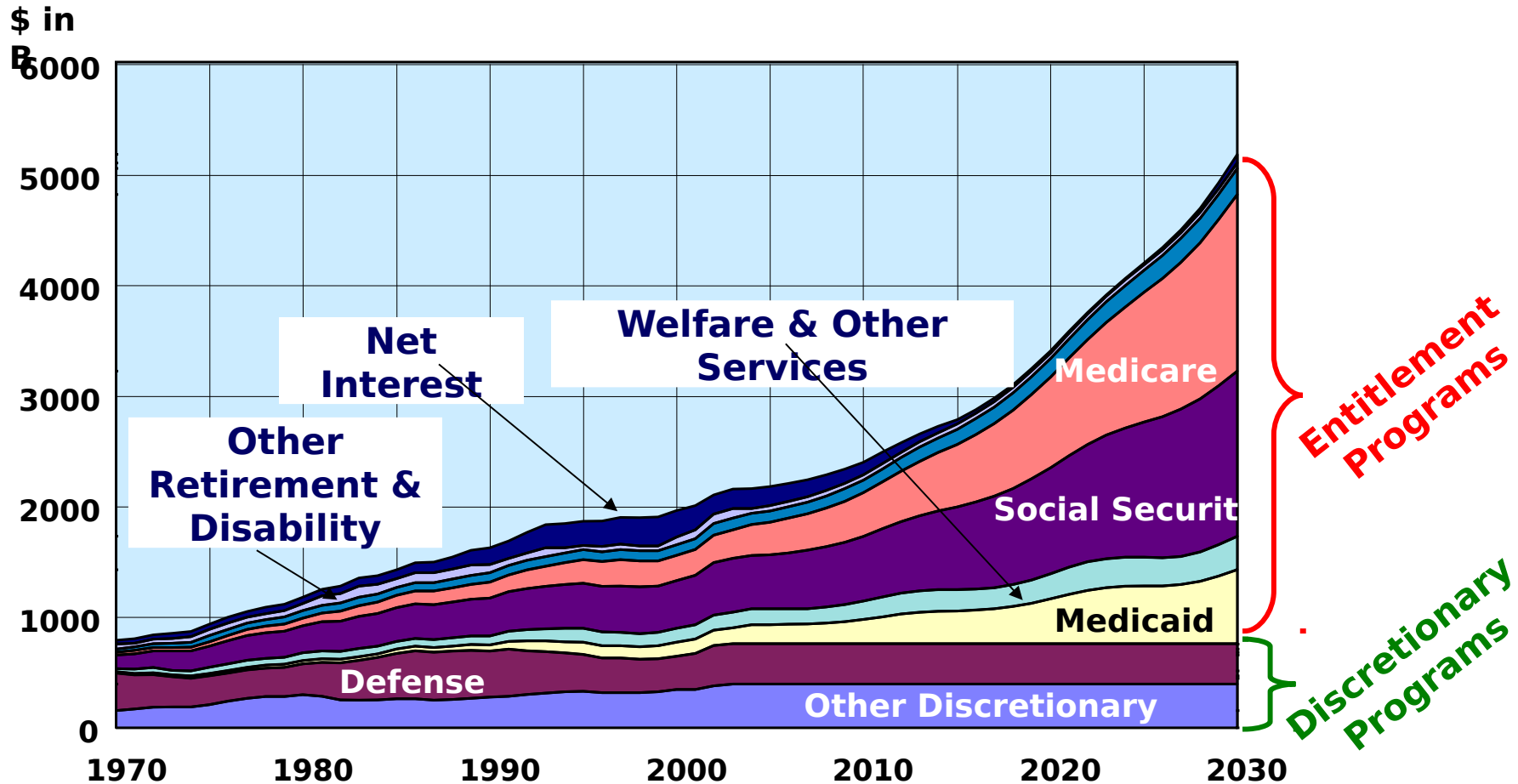


- ❖ **Increasing Costs**
 - ✓ **People**
 - ✓ **Ops / Training**
 - ✓ **Equipment**
- ❖ **Competing Demands**
 - ✓ **Global Recession**
 - ✓ **Nat'l Debt & Priorities**
 - ✓ **Baseline Funding Pressure**
- ❖ **Persistent Threat**
 - ✓ **Irregular Warfare**
 - ✓ **Near Peer Competitors**





Federal Budget Programs



... DoD Competes for Dollars



Situation

- **Experiencing Most Conservative Fiscal Environment**
- **Naval Aviation Costly & Marine Aviation is 40% of Naval Aviation**
- **Maintaining Future Combat Readiness Requires Efficient and Effective Resource Utilization - Readiness Cannot be Used as a Pretense to Justify Wasteful Behaviors (Result is Loss of Resources and REDUCED Readiness)**
- **Current Readiness (CR) Process Within the NAE Provides Framework for Addressing Readiness Issues Within Each Type/Model/Series (TMS)**
 - Obtain Help from Enterprise
 - Share Successes / Best Practices Across Enterprise
- **Marine and Navy Aviation Structured Differently; Each Developed Different Approaches Within CR**

USMC Cannot Be Wasteful Under Pretext of Preserving Operational Effectiveness



NAE...Bottom Line Upfront



Naval Aviation

Focused on delivering combat en



Naval Aviation Enterprise

***Supports the delivery of combat effects
...Better, Smarter, Faster***



You

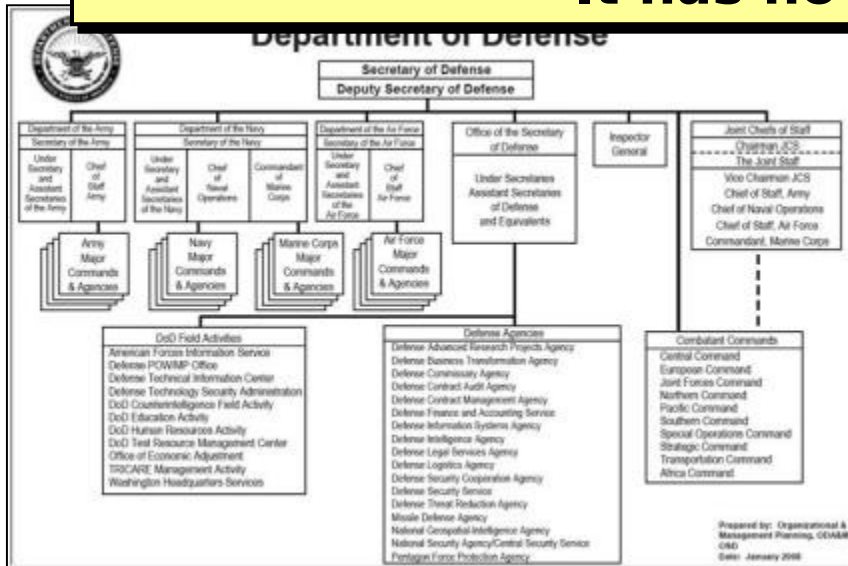
***The driving force behind the Naval
Aviation Enterprise***

***Our strategic environment and fiscal realities require
us to continuously pursue process improvement...
everywhere***



NAE Construct

**The NAE is not an “organization;” It is not a command;
It has no WIC, no TOA.**



**NOT a Title 10
authority**

**NOT a hierarchical
command**

***The NAE is a model for behavior...An aligned membership
voluntarily subscribing to a set of principles and tenets***



Naval Aviation ~~Enterprise~~



A WARFIGHTING
PARTNERSHIP



SINGLE PROCESS OWNER



NAVY
Research, Development & Acquisition



SINGLE FLEET DRIVEN MEASURE OF SUCCESS:

AIRCRAFT READY FOR TASKING AT REDUCED COST



MISSION & VISION STATEMENT

**Advance and Sustain Naval
Aviation Warfighting Capabilities
at an Affordable Cost; Today and
in the Future.....**

NAE Membership

CNAF	DC(A), USMC
NAVAIR	CNAF ED
OPNAV N43	CNAL / CO-CR CFT
CNAFR	OPNAV N88 / FR CFT
OPNAV N2/N6	CNATRA
TF CFT	IRMT

NAE Air Board EXCOMM

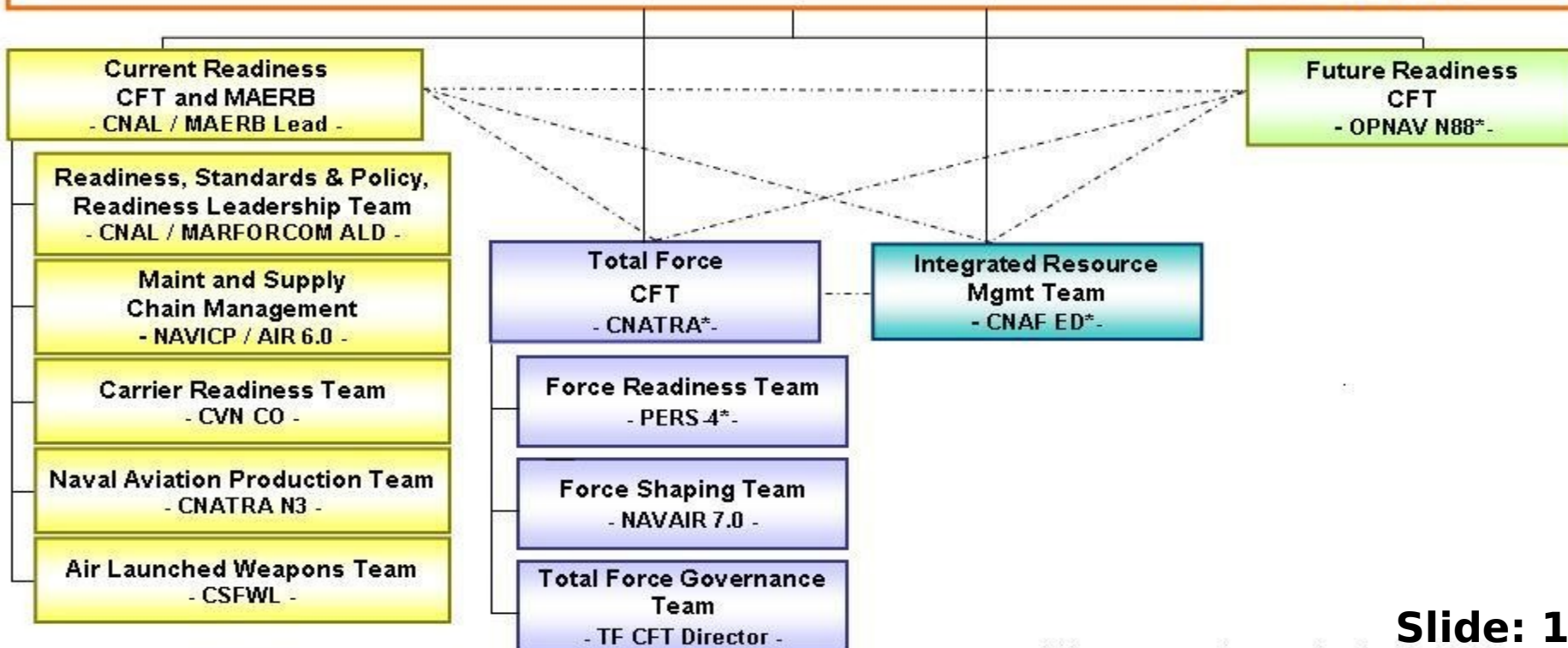
OPNAV N82	USFF N4/7
NAVICP	NSAWC
COMFRC	PEO (A)
PEO (C4I)	PEO (Carriers)
PEO (JSF)	PEO (T)
PEO (U&W)	PEO IWS
AIR 1.0	MAERB

Extended Air Board Members

NAVSEA	MARFORRES
MARFORPAC	MARFORCOM
CNP	CNIC
NETWARCOM	CNETC
SPAWAR	ONR
DASN-SHIPS	DASN-AIR
DASN-C4I	DSCR
TECOM	NSC

← NAE Air Board

← NAE Extended Air Board



Slide: 10

* Not permanently associated with this billet



Levels of Enterprise

Engagement

• **Flag / General:**

- 0 Lead Naval Aviation / NAE
- 0 Develop NAE strategy
- 0 Represent NAE equities in organizational meetings
- 0 Participate in NAE strategic communications efforts
- 0 Elevate barriers / issues

• **C-5 Command:**

- Lead command
- Warfighters / warfighter support
- Share key messages and themes at squadron-level
- Responsible stewards of allocated resources
- Barrier identification / removal

• **Major Command:**

- 0 Lead command(s)
- 0 Warfighting / Fleet focus
- 0 Materially participate in NAE activity drumbeat
- 0 Resource allocation / CPI
- 0 Process discipline (metrics)
- 0 Barrier identification / removal
- 0 Advocate for the NAE

• **Dept Head and Junior Officer:**

- Lead Marines and Sailors
- Tactician / Manager
- "Fly the Profile"

• **A Marine / Sailor**

- Deckplate leadership
- AIRSpeed practitioner (as function of rate/MOS and

Everyone engages the NAE...in varying degrees...but everyone benefits



NAE Governance



Principles:

- Consistently apply cross-functional process thinking
- Establish and maintain process discipline
- Utilize a set of consistent, integrated and hierarchical metrics
- Ensure full and consistent transparency of data, information and activities
- Establish and maintain accountability for actions and results
- Apply an integrated governance structure
- Total ownership costs perspective
- Single Fleet driven metric

Tenets:

- Cross-functional process improvement
- Dedication to effectiveness and efficiency
- Active participation in scheduled events and tasks as a priority
- Transparency in process and data
- An (imperative) to challenge past practices and assumptions
- A commitment to the greater good of Naval Aviation



NAE Governance

- Naval Aviation Enterprise (NAE) Air Board
 - o Current Readiness Cross Functional Team
 - o Total Force Cross Functional Team
 - o Integrated Readiness Management Team
 - o Future Readiness Cross Functional Team
- **Marine Aviation Executive Readiness Board (MAERB)**
- Readiness Leadership Team (RLT)
- Type Model Series Teams (TMS)



CR Improvement

Program

MCO 3710.7



Marine Corps Aviation Current Readiness Improvement Program

https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/current_readiness/USMC%20Orders/Forms/AllItems.aspx

- Efficiently Use Available Resources
- Improve Current Readiness and Integrate w/NAE
- Mission
 - o Optimize Material Resource Allocations and Expenditures
 - o Minimize Logistics Downtime and Delays
 - o Achieve Required Readiness for Warfighting Missions
- Intent
 - o Provide Operational Commanders More Accurate and Actionable Information
 - Identify and Assess Readiness Drivers
 - Isolate Root Causes
 - Shape Future Resource Decisions
 - o Provide More Precise Measures of Readiness, Entitlement, and Deficiencies
 - o Provide Better Responsiveness and Support Aligned to Readiness Goal
 - o Facilitate Aggressive and Proactive Decision Making



USMC CR Participation



DC/A Objectives

- Increased Readiness
 - *Increased In-Reporting (IR) rates*
 - *Decreased out-of-reporting (OR) rates*
 - *Reduced Depot TAT*
- Reduced Direct Maintenance Man-hours per Flight Hour (DMMH/FHP)
- Reduced Flight Hour Costs
- Extend Airframe Service Life for legacy aircraft
- Achieve programmed service life for new platforms
- Increase health of organizational and intermediate level maintenance departments

**Fight & Train Now...
and Posture The Marine Corps For The Future**

Marine Air Board



MAG Commander's Job

"Posture Squadrons to Create Sorties"

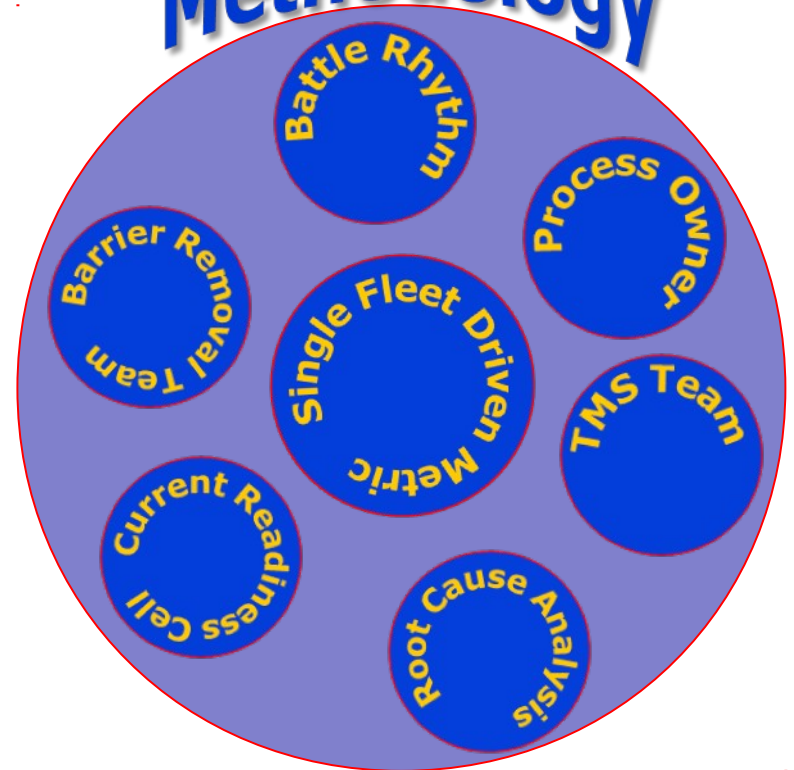
Systematically Resource MAG

Current Readiness is the Process

MAG CO's Directed Tasks

- oLead TMS Team if Designated and Ensure Cooperation with Other Leads
- oDesignate Resident MALS CO as TMS Logistics Lead and Ensure Cooperation with Other Leads
- oLead or Support Development of Aircraft Metrics
- oPost Material Readiness Data on the Aviation Maintenance/Supply Readiness Report (AMSRR) portal
- oReport Status and Progress Toward Readiness Improvement Via CR Process
- oImplement AIRSpeed Throughout MAG
- oProvide Monthly Metrics Roll-Ups to

Methodology





Expectations for MAG Commanders



- **Mentoring, care, and feeding of the organizations - 'Natural'**
- **Bring Enterprise Resources to Bear; Posture Squadrons for Success: ~33% of Job - 'Unnatural'**
 - **NAE**
 - **Understand the Broader Value of the Enterprise and Take Ownership**
 - **Participate and Understand Available Tools and Determine Path Forward**
 - **Be Cognizant of Enterprise Requirements**
 - **Be Good Stewards of Available Resources**
 - **Use NAE to Gain a Better Understanding of Activities to Stop Doing**
 - **Attain an Understanding of How NAVAIR Plays into the Equation**
 - **MALS Commanders are Right Hand Leaders**
 - **Cost Much More Important Than Ever Before**
 - **Cost War Room is Invaluable - Identifies Hidden Costs (Monthly)**
 - **MALS CO is Your Center of Gravity for Providing Costs Analysis and Understanding Excess Costs**
 - **Squadron CO's Also Accountable for Costs**
 - **Ensure MALS has Right Metrics for Use**
 - **ALD is Invaluable Resource and Team Member; Make the Best Use of this Partnership**
 - **Maintain Sustained Energetic Bureaucratic Communication**
 - **Delineate and Understand Expectations: Ensure Across the Board**



O'Level Maintenance State

Current

- Anxiety Based Behavior
- Short-term Results vs. Long Term Consequences
- Minimal Technical Skill
- Encouraged to Improvise
- Resource Developments by Moving People / Aircraft
- Disparate and Stove-piped Aviation Logistics Resource Management Efforts

Required

- Trust Based Behaviors
- Make Decisions Based on Understanding of Short and Long term consequences
- Understand how Maintenance Decisions Impact all Department w/in Organization
- Develop Technical Workforce
- Focus on Building Capability and Capacity to ensure High Reliability
- Core Capable MAG based on Core Capable Squadrons
- Stability as a Necessary Condition
- Uncertainty Management
- ETHOS - "Do it Right"; "Quality First"

Barriers

- System Encourages Crisis Management - Swashbucklers vs. Farmers
- 'Doing the Right Thing' makes Unit Look Worse For a Period of Time
- Key Billet Holders Optimize Their Corner of Maintenance Department

Quality A/C Reliability is An Enabler for Production (CMC)



Baseline For Growth



- **ID Critical Tasks and Build Capability**
 - Training
 - Teams and Leadership
 - Technical Procedures
- **A/C Utilization**
- **Operational Environment (How / Where)**
- **How maintenance is Conducted**
- **CR Metrics Modifications**
 - Metrics Related to Root Cause Analysis across Naval Aviation
- **Center of Excellence Tied to Wings**
- **Development and Seamless Integration of Replication Process**



Baseline For Growth

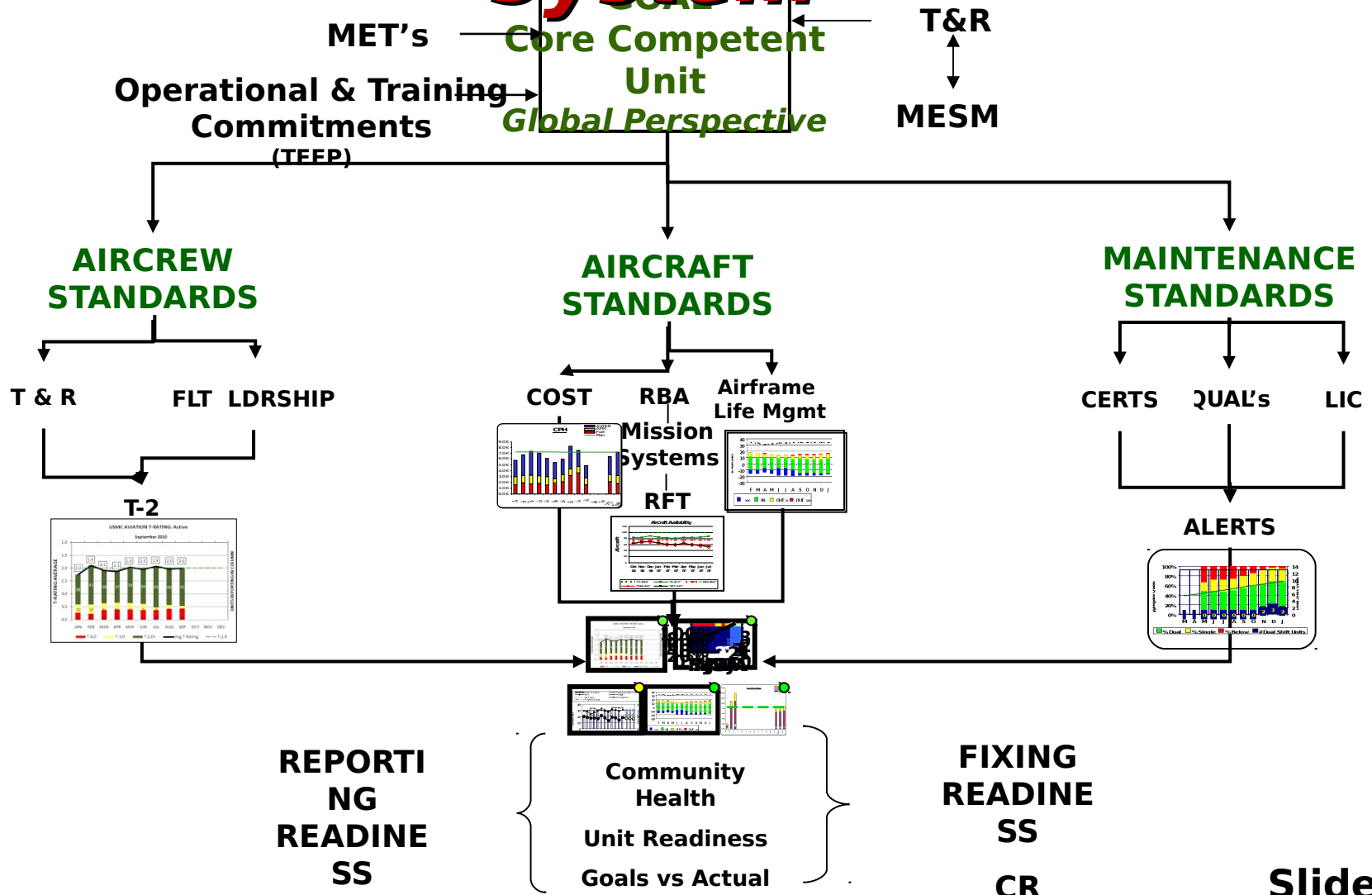


- **Quarterly Discussions on Strategic and Enterprise Level Issues**
- **Reduce Cycle Time (Maintenance Overhead) and Increase Time on Wing**
- **Battle space Preparation (process improvement understanding)**
- **ROE for Maintenance Department**
 - **Maintainers Fatigue Management (reduce performance errors)**
 - **Standardized and Promulgated Maintenance Dept / TMS SOP's Desk Top Procedures**
- **Availability Management vice "Availability"**
- **Scheduled Events (set measurement tempo) used as a basis for metrics timing vice arbitrary (AMSRR/RBA/RFT)**
- **O-I Supply Metrics MUST be Readiness Aligned**
- **Incentivize Enterprise Ownership / Behavior while Removing Disincentives**



Current Readiness

System





PART II





USMC Integration into NAE

Naval Aviation Enterprise (NAE)
Air Board (AB)
(DC/A with MARFORs
as extended members)

USMC
Leadership
(DC/A)

Current Readiness (CR)
(Formerly NAVRIIP)

Co-led by:
CNAF-East & MAERB Lead



Marine Aviation Executive
Readiness Board
(MAERB)



Readiness
Standards & Policy
(RS&P)

Maintenance &
Supply Chain
Management
(M&SCM)

Readiness
Leadership
Team (RLT)
(Advisory)

MAERB
Support

TYCOM
Readiness
Workshop
(TRW)

CR CFT

MAERB
Review

TYCOM
Readiness
Workshop
(TRW)

Direct
Reporting &
Support
NAE Report
& Support

TMS Teams



'MAERB's Purpose'

- **Leadership Voice for Marine Aviation**
 - **Prioritization, Advocacy, and Synchronization of Aviation Resources and Direction within USMC Aviation**
 - **Provide a USMC Vetting Process for Integration with the NAE Air Board**
 - **Oversight of USMC "Current Readiness" Process**
 - **Identify and Provide Guidance to Resolve Barriers and Achieve TMS / USMC Readiness Expectations**



MAERB's Performance Objectives

DC/A Objectives

- Increased Readiness
 - Increased In-Reporting (IR) rates
 - Decreased out-of-reporting (OR) rates
 - Reduced Depot TAT
- Reduced Direct Maintenance Man-hours per Flight Hour (DMMH/FHP)
- Reduced Flight Hour Costs
- Extend Airframe Service Life for legacy aircraft
- Achieve programmed service life for new platforms
- Increase health of organizational and intermediate level maintenance departments

Fight & Train Now...
and Posture The Marine Corps For The Future

- **Increase Aircraft Readiness**
 - **Increase Aircraft Availability**
 - **Increase In-Reporting (IR) rates**
 - **Decrease out-of-reporting (OR) rates**
 - **Reduce Depot TAT**
- **Reduce Workload on Marines**
- **Understand & Manage Costs**
- **Extend Service Life for Legacy Aircraft**
- **Achieve Programmed Service Life for New Platforms**
- **Increase Health of Organizational and Intermediate Level Maintenance Departments**
- **Increase Sortie Generation**
- **Increase Combat Power**
- **Increase Reliability of Aircraft & Components**
- **Increase Reliability of Logistics Process**

Marine Air Board



'Readiness Leadership Team'

- **Purpose:** Support, advise the MAERB and TMS Teams while enabling implementation of the Marine Current Readiness Program
- **Members:** HQMC (ASL-1 & APP-10), MARFOR (ALD's & G-3s) Marine Aircraft Wing (ALD's & G-3s). Supporting: Senior Marine (NAVICP, DSCR, COMFRC), Marine Liaison (COMNAVAIRSYSCOM, CNAF, CNAL)
- **Functions:**
 - o Interface with the Tycom Readiness Workshop and Cross Functional Teams (Readiness Standards & Policy and Maintenance & Supply Chain Management)
 - o Support the TMS Teams
 - o Oversee Marine Aviation Current Readiness Implementation and Roll-Out
 - o Manage Marine Aviation Master Schedule
 - o Lead Metrics Configuration Control Board
 - o Oversight of Actions In Process (AIP) execution



'TMS Team'

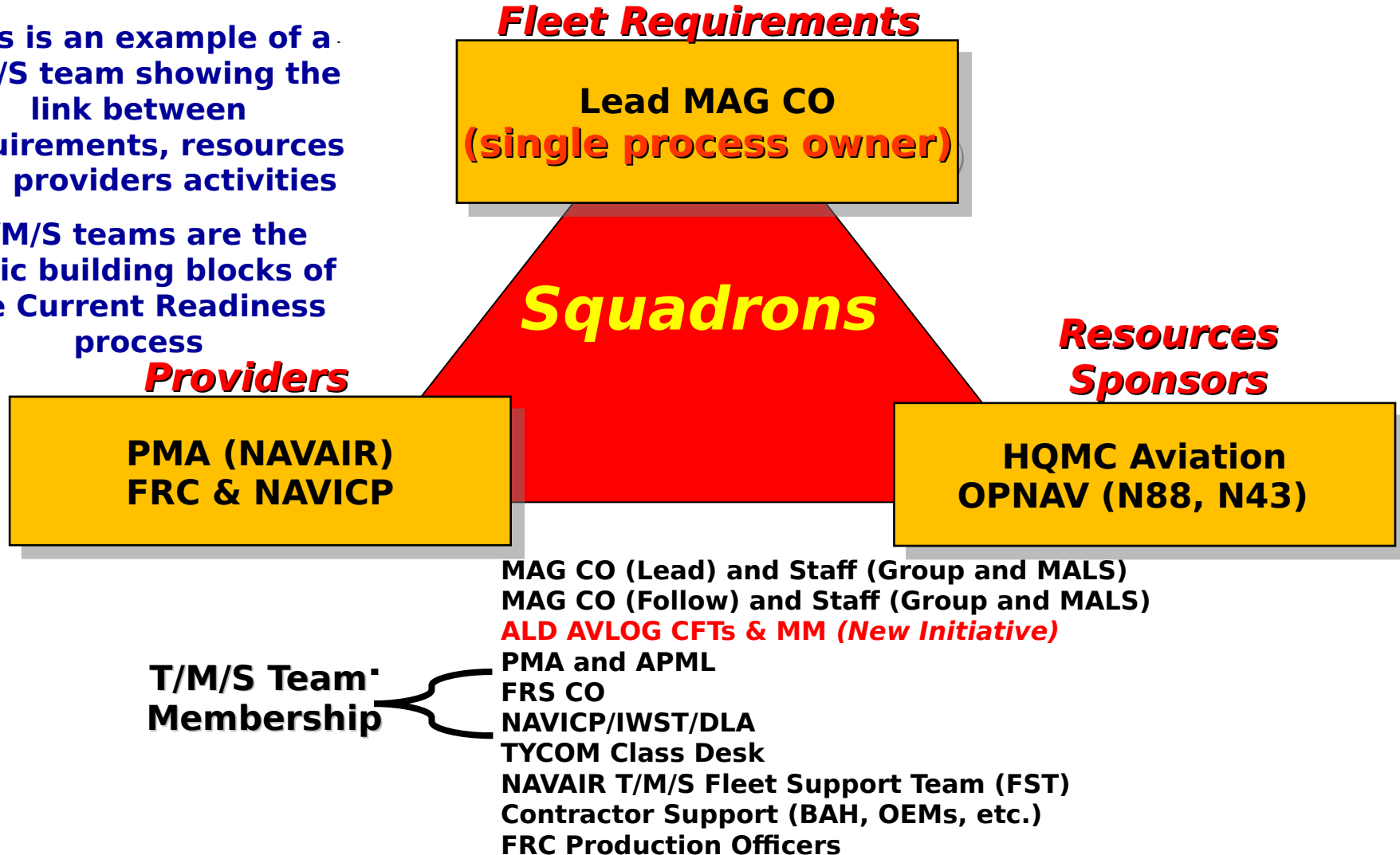
To Align Marine Aviation and Enable Organizations to Effectively and Predictably Achieve Required Levels of Aircraft Ready for Tasking to Produce Core Competent Units



Type/Model/Series (TMS) Team

This is an example of a T/M/S team showing the link between requirements, resources and providers activities

T/M/S teams are the basic building blocks of the Current Readiness process





'Current TMS Construct'

A/C

Lead

Backup Lead

HMM MAG 39 36/49

HMH (D) MAG 24

HMH (E) MAG 29

16/49

HMLA MAG 39 29/49

VMM MAG 26 16

VMA MAG 13 14

VMAQ MAG 14

VMGR MAG 11

14/36/41/49

VMEA MAG 11

**Marine Aviation TMS Team Total Force
Construct**



'TMS Process'

- Methodology
 - o Holistic Enterprise-wide Application of Influence to Create and Maintain Readiness Expectations
- Measurement Tools
 - o Standardized Metrics
 - **MALS Metrics (*Incoming Initiative*)**
 - o "Cockpit Charts"
 - ACC based on T-2 DRRS - MC
 - Maintainer Core Competency (MCC)
 - Cost per Flight Hour (CPH): Cost Performance Index (CPI) / Execution Index (EI)
 - Aircraft Life Management (ALM)
 - Aircraft Availability: Ready Basic Aircraft (RBA) / Ready For Tasking (RFT)
 - o **"TMS Focus Areas" (*Incoming Initiative*)**
- Reporting / Briefing Chain
 - o MAERB
 - o TYCOM Readiness Working Group (TRW)
 - o Current Readiness Cross Functional Team (CR CFT)
 - o NAE Air Board



TMS Briefing



	MAERB / CR CFT	TRW <i>(TYCOM Readiness Workshop)</i>	NAE Air Board
FORMA T	Brief MAERB first, then the Current Readiness CFT	Working group approach hosted by MARFOR/HQMC	Brief CNAF, DC(A), NAVAIR NAE AB
PURPO SE	Cockpit chart review <i>RFT aircraft status</i> <i>Linkage to maintenance metrics</i> Gap Closure Process <i>BRT review</i>	Identify gaps to readiness & cost entitlements / goals Rank order & prioritize barriers Present root cause analysis Develop action plans	High level summary brief on the health of the TMS for both readiness & cost Explain gaps and action plans and expected completion time frame
RESULT	Escalate barriers as required	Assign AIP's Escalate barriers as required	Redirect barrier removal actions as required

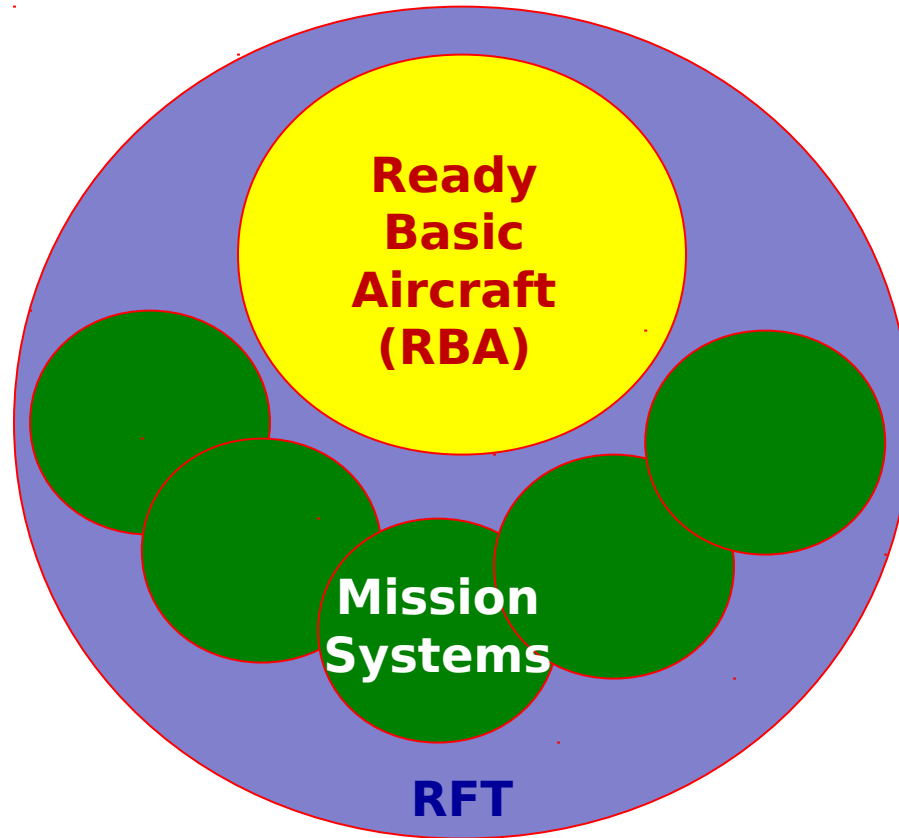


Definitions

- **Flight Line Aircraft:** An aircraft which is in the custody of a squadron regardless of material condition
- **Ready Basic Aircraft (RBA):** The minimum aircraft configuration required to fly a readiness training or operational sortie
 - *A mission capable aircraft that is functional check flight complete that is capable of day or night IMC field flight with necessary communication, IFF, navigation, flight and safety systems required by applicable NATOPS and FAA regulations*
- **Mission Systems or Sets (RFI Systems):** Those system(s) required in conjunction with RBA to complete specific training or operational missions.
- **Ready for Tasking (RFT) Availability:** A monthly calculation (algorithm) of the average available aircraft and missions systems



Ready for Tasking (RFT)

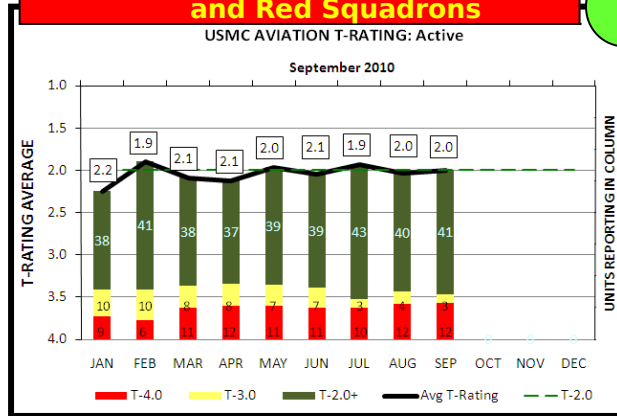


**Right aircraft configuration; Right place;
Right time to support expected
readiness.....**



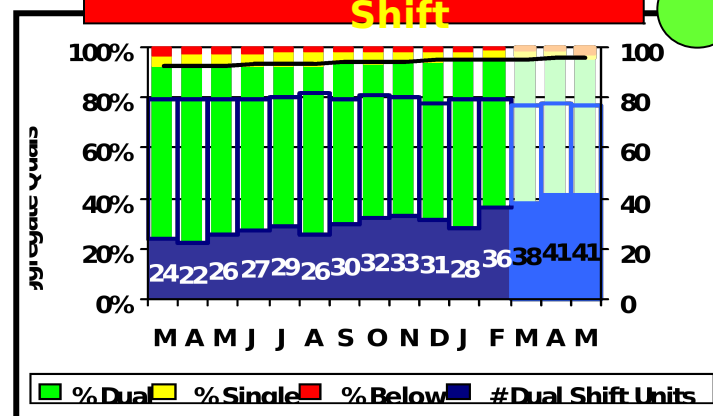
USMC Top Five

Average T-Rating of Green, Yellow and Red Squadrons



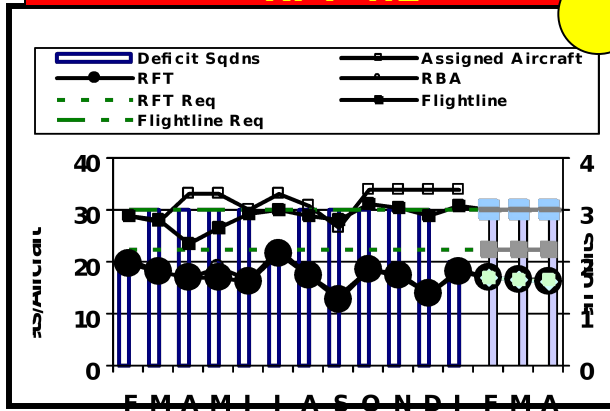
T-2 Rating

2 Dual Shift; 1 Single Shift



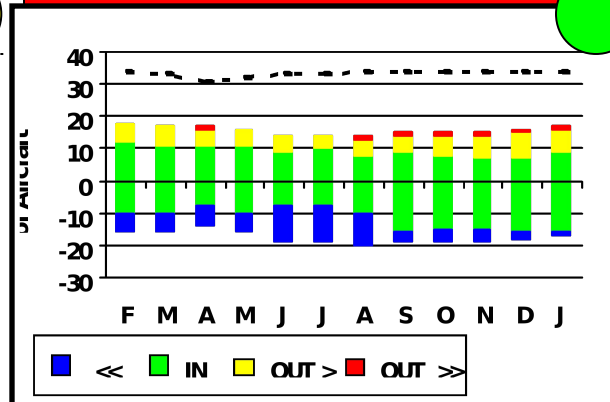
Maintainer Core Competency

GAPS: F/L 0, RBA 4.2, RFT 4.2



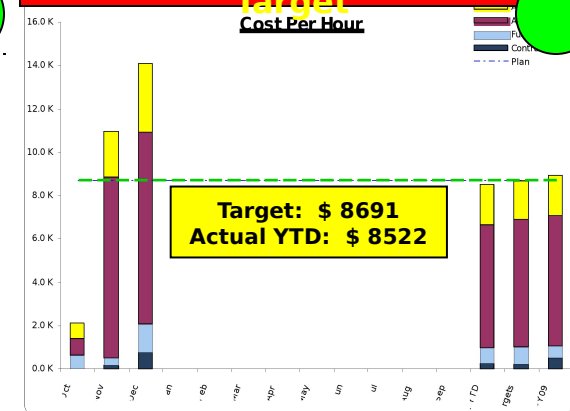
RFT Availability

No Issues



Aircraft Life Management

Index 7 CPI: 1.01 SPI: 1.05 CPH YTD: \$169 Below Target



Cost



USMC Avn T-Rating Roll Up



Chart Purpose: The panel depicts the labeled community's averaged T-Rating as well as the number of community squadrons reporting T-2 or above, T-3, and T-4 in DRRS-MC for a particular month. MCO 3000.13 (30 Jul 10) provides policy and procedures on DRRS-MC reporting.

T-Rating Measurement: A flying squadron's resultant T-Rating in DRRS-MC is the lower rating between the commander's "Combat Leadership assessment" and the unit's "training percentage." T/M/S T&R Manuals contain Core Model Minimum Requirements (CMMR) for each combat leadership designation as well as CMMRs for each MET.

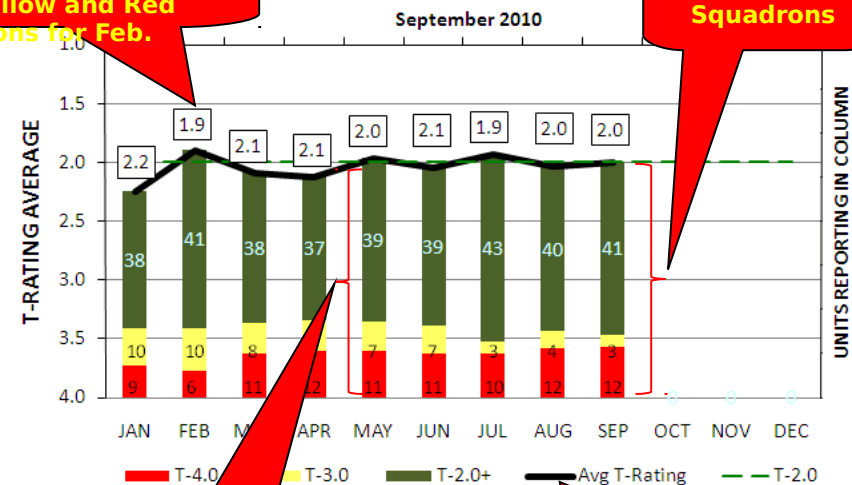
- **Combat Leadership Assessment:** Commander's comparison of the designated combat leaders on-hand compared to the combat leadership CMMR.
- **Training Percentage:** Simple percentage of the number of unit METs trained to standard compared to the total number of METs in that METL. Each MET contains a Training Standard defined by the T&R Crew CMMR for that MET. The commander compares the number of MET capable formed crews to the Crew CMMR for that MET to determine if the squadron is "trained to standard" for that particular MET.

Chart Depiction: The multi-colored bars (Green, Yellow & Red) represent the number of squadrons reporting T-2 or above, T-3, and T-4 for their Core METL. The number contained in the box above the multi-colored bar represents the averaged T-Rating for that month.

1.9 is Average T-Rating of Green, Yellow and Red Squadrons for Feb.

USMC AVIATION T-RATING: Active

Aggregate 56 Squadrons



Number of Squadrons Is Constant regardless of Height. Bar Height Varies as a Function of T-Rating Average.

Average T-Rating line provides a visual trend line.

- 2.1**
- Green: The number of squadrons T-2 or above
 - Yellow: The number of squadrons T-3
 - Red: The number of squadrons T-4
- The averaged T-Rating for that month using all reported squadrons individual T-Ratings**



Maintainer Core Competency







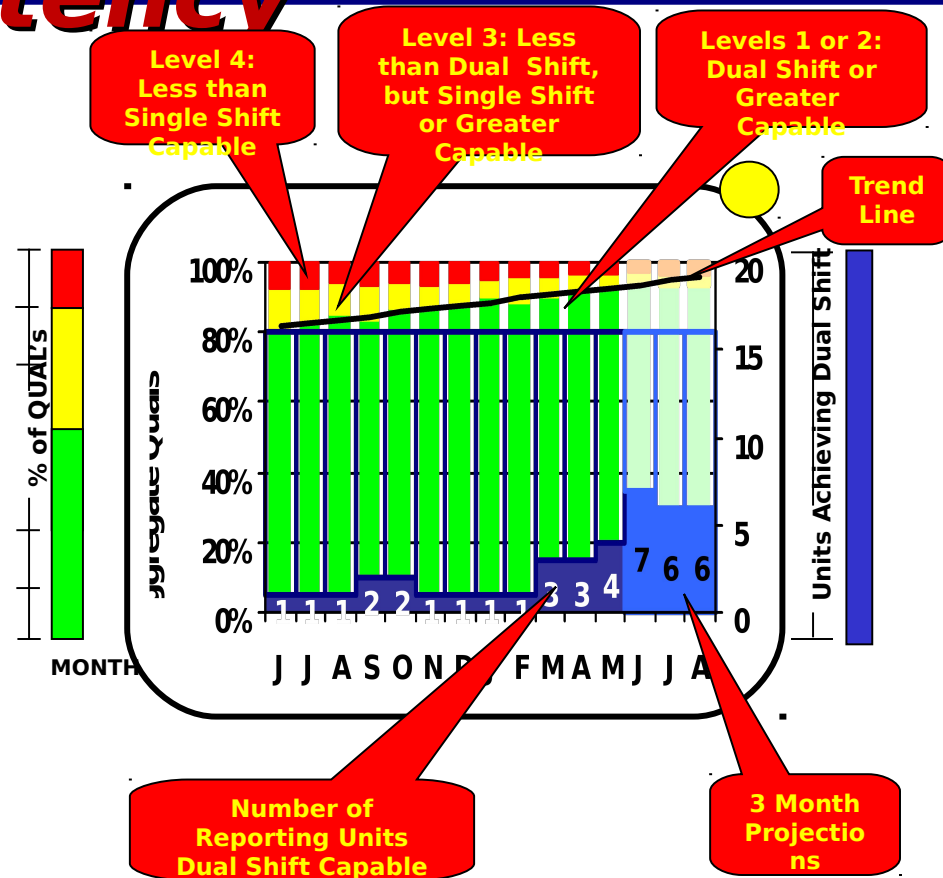
Chart Purpose: The panel depicts the Qualification / Certification (QCL) Skill Requirements for enlisted pay grades E1-E9 for critical MOS's, and compares to Total Qualifications by skill set against the Total Actual Qualified On-Hand Manpower for the specific skill sets. It also shows the total number of Reporting Units within the T/M/S which are Dual Shift Capable.




MCC Standards: Maintenance Chiefs, in conjunction with the HQMC MC, developed the minimum requirements to run dual shift maintenance operations for each T/M/S team.

MCC Measurement: Qualifications are measured in seven (7) specific areas: Safe for Flight, Plane Captains, Inspector Billets, Support Equipment License, MATMEP III & IV, HI/LOW Power.

RFT Goals: For all reporting units to have dual shift maintenance capabilities regardless of deployment status.

-  **Levels 1 & 2:** Dual Shift Capability, [$\geq 100\%$]
Qualifications which are Dual Shift Capable (Levels 1 & 2) divided by total qualifications.
-  **Level 3:** Less than dual shift capability, but greater than single shift capable. [$<100\%$, but $\geq 50\%$]
Qualifications which are Single Shift Capable (Level 2) divided by total qualifications.
-  **Level 4:** Less than single shift capable. [$<50\%$]
Qualifications which are less than Single Shift Capable (Level 1) divided by total qualifications.
-  **Dual Shift Capable Units:** Number of Reporting Units which are completely Dual Shift Capable. [Read from the Right Axis]



-  Green: % of Reporting Units are Level 2 or greater
-  Yellow: % of Reporting Units Level 1
-  Red: % of Reporting Units are less than Level 1



RFT Availability

Chart Purpose: The panel provides a consolidated average status of RFT (Ready-for-Tasking) Sets; as well as Assigned, Flight Line and Ready Basic Aircraft.

RFT Requirement: Requirements are based on the number of RFT Sets required to support flying hours, aircrew training during contingency and deployment. [Requirements are identified within the T/M/S CNAFINST 3510 Standards]

RFT Availability (Sets): A calculated number based on the availability of RBA Aircraft and Ready Mission Systems measured against Requirements.

RFT Goals: T/M/S goals are to reduce their previous year's Gap by 12.5%, with an ultimate goal of closing the RFT Gap to Zero.

Assigned Aircraft: Total number of within the T/M/S' inventory

Flight Line Requirement: Equal to the T/M/S' PMAA

Flight Line Actual: Number of daily aircraft in custody of the Reporting Unit(s) regardless of material condition.

RBA / RFT Requirement: Usually 75% of Flight Line Requirement

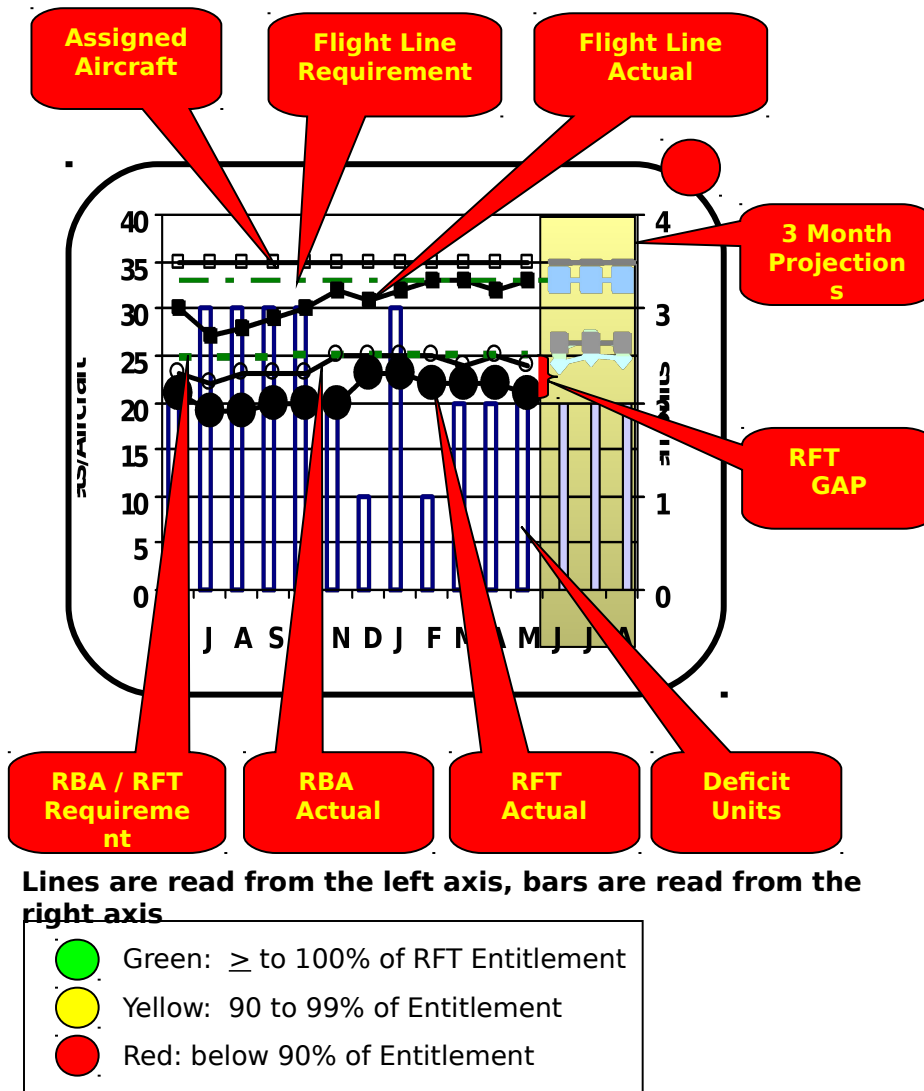
RBA Actual: Average number of daily RBA within the Unit as reported within the AMSRR.

RFT Actual: Number of calculated sets of equipment based on RBA and Mission Set standards.

RFT GAP: Difference between RFT Entitlement & Actual

Deficit Units: Number of Reporting Units that are below the Required RFT Sets, and contributing to the RFT GAP [Read from the Right Axis]

3 Month Projections





Aircraft Life Management

Chart Purpose: Proper management of aircraft utilization ensures that airframes last their intended Service Life by managing airframe usage within acceptable range of life limiting parameters.

ALM Measurement: This metrics measures the average flight hours per BUNO over the past 24 month's running average and projects its "service life" as it relates to the expected "end-of-life" or scheduled transition date to a new platform. Each T/M/S has its own mathematical model to calculate and populate the ALM metric.

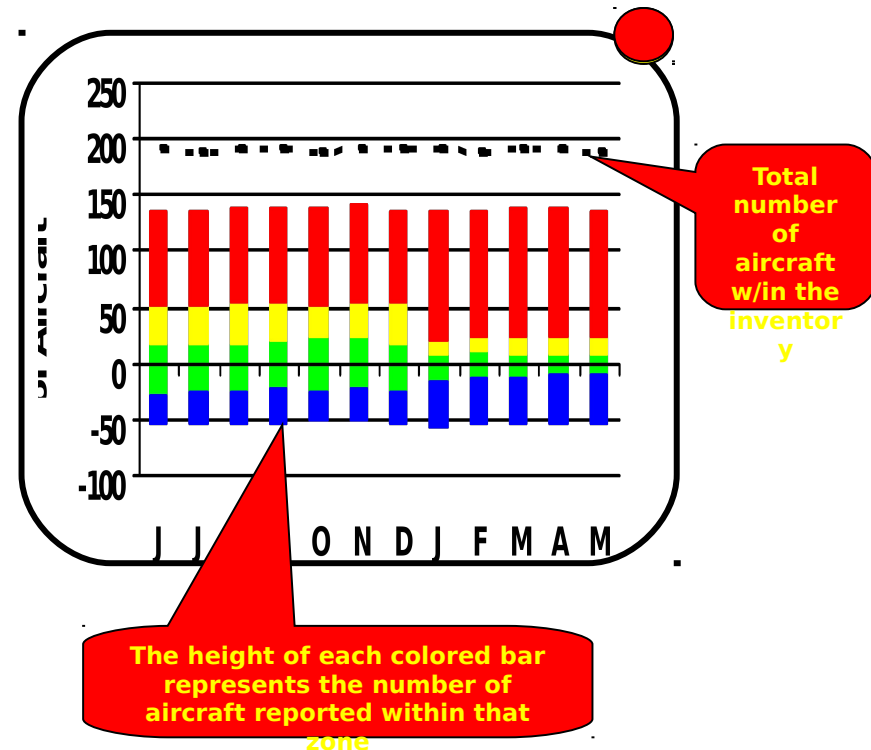
Green = In Limits: This is the acceptable forecast utilization, Fatigue Life Expended (FLE) and Total Life Index (TLI) rate. Aircraft in this zone are projected to fall + or - 12 months of projected retirement/transition date, or within + or - 10% of a published aircraft utilization rate.

Blue = In Limits: Aircraft within this zone will reach the expected service life, but are being under utilized. Aircraft projected to exceed their retirement/transition date by more than 12 months, or is being under utilized by more than 10% of a published aircraft utilization.

Yellow = Over Utilized: The yellow zone depicts utilization that deviates from the optimal expenditure line, but may not be cause for alarm. Aircraft projected to fall short of retirement/transition dates by 12-24 month, or is within 10-20% of published aircraft utilization.

Red = Over Utilization: The red zone depicts utilization rates outside the planned utilization rate, and may indicate severe problems. Aircraft projected to fall short of retirement/transition dates by more than 24 months, or is greater than 20% over published aircraft utilization.

A "red" aircraft for FLE, is an aircraft above glide slope, and moving away from glide slope. Fatigue Life





Cost Per Hour Performance

Chart Purpose: Compares the Cost per Flight Hour performance against the OP-20 Budget.

Cost Measurement: Measures the monthly total costs by AFM, AVDLR, Fuel and Contract costs found using the ACES (Aviation Cost Evaluation System) cost tool.

SPI (Schedule Performance Index): = Earned Value divided by Planned Costs.

SPI: =1 Flight Hour schedule is on plan

SPI: <1 Flying less than plan

SPI: >1 Flying more than plan

CPI (Cost Performance Index): = Earned Value divided by Actual Cost. [AFM, AVDLR, fuel & contract costs are included in the current CPI calculation. Depot and personnel costs will be included in future CPI calculations (22 July 10)]

CPI: =1 Spending as planned

CPI: <1 Costing more than plan (Over Budget)

CPI: >1 Costing less than plan (Under Budget)

EI (Execution Index): Previous 2 FY AOM CPH (AFM & AVDLR) adjusted into current year dollars compared to the current FY.

EI: =1 Costing the same as previous 2 year avg

EI: <1 Costing more than previous 2 year avg

EI: >1 Costing less than previous 2 year avg



AFM (Aviation Fleet Maintenance): Consumables



AVDLR (Aviation Depot Level Repair): Repairables



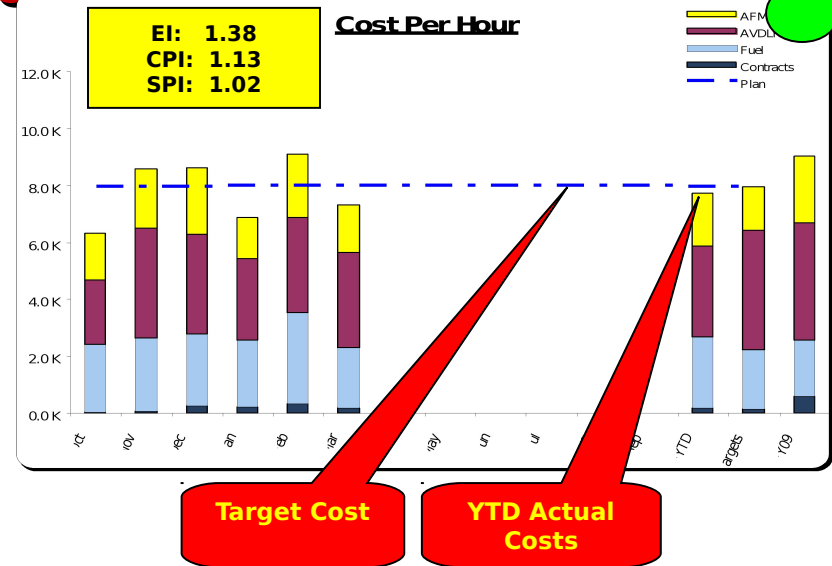
FUEL: Cost of fuel consumed



FW (Contract Costs): Includes charges such as

Contract Logistical Support, Pack Up Kits (PUK) Carcass Charges, Work Request, Reimbursable

Transactions, et.



Looking for EI & CPI equal to or greater than 1.00

Example: EI of 1.38 = 38% below previous 2 year average spending
CPI of 1.13 = 13% under budget

Using the lower of CPI and EI:

- Green:** .95 and Above
- Yellow:** .90 - .94
- Red:** Below .90



USMC RFT Availability Roll-Up



Chart Purpose: The panel provides a consolidated average status of RFT (Ready-for-Tasking) Available Aircraft across all T/M/S with the USMC.

RFT Requirement: Requirements are based on the number of RFT Sets required to support flying hours, aircrew training during contingency and deployment. [Requirements are identified within the T/M/S CNAFINST 3510 Standards]

RFT Availability (Sets): A calculated number based on the availability of RBA Aircraft and Ready Mission Systems measured against Requirements.

RFT Goals: T/M/S goals are to reduce their previous year's Gap by 12.5%, with an ultimate goal of closing the RFT Gap to Zero.

RFT Requirement: Usually 75% of Flight Line Requirement for each T/M/S within the USMC

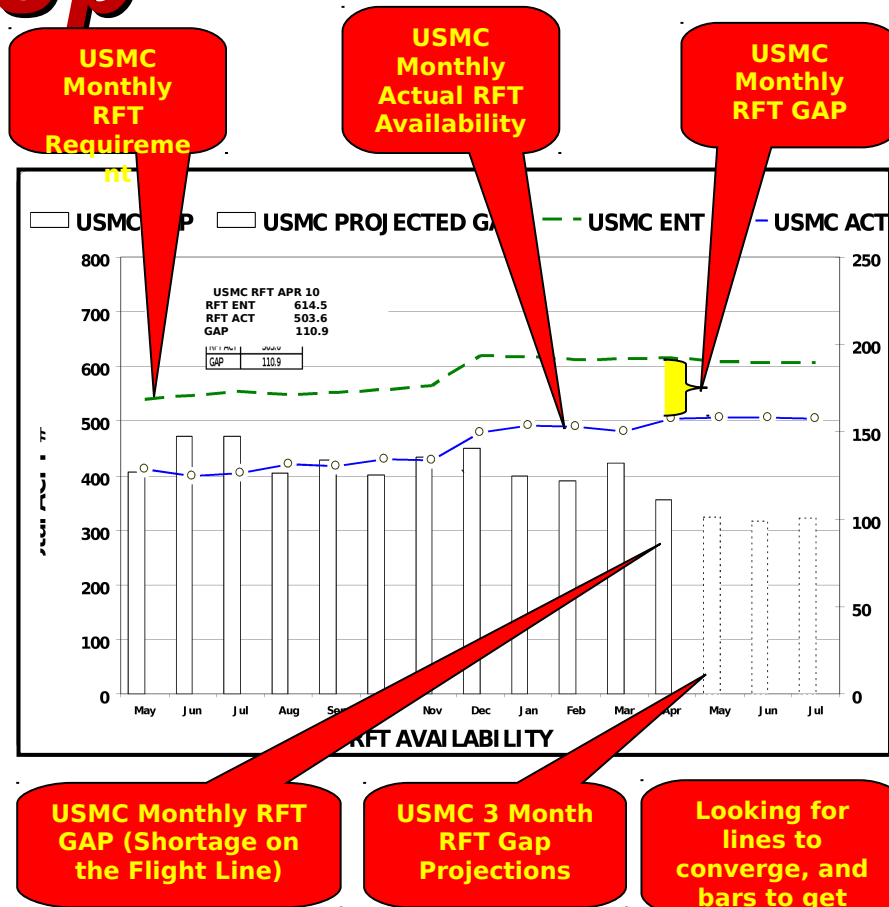
RBA Actual: Average number of daily RBA within the Unit as reported within the AMSRR.

RFT Actual: Number of calculated sets of equipment based on RBA and Mission Sets across all T/M/S' within the USMC

RFT GAP: Difference between RFT Entitlement & Actual

Deficit Aircraft: The RFT Aircraft Gap depicted by the Bar[Read from the Right Axis]

3 Month Projections



Lines are read from the left axis, bars are read from the right axis



Overall USMC Cost Performance



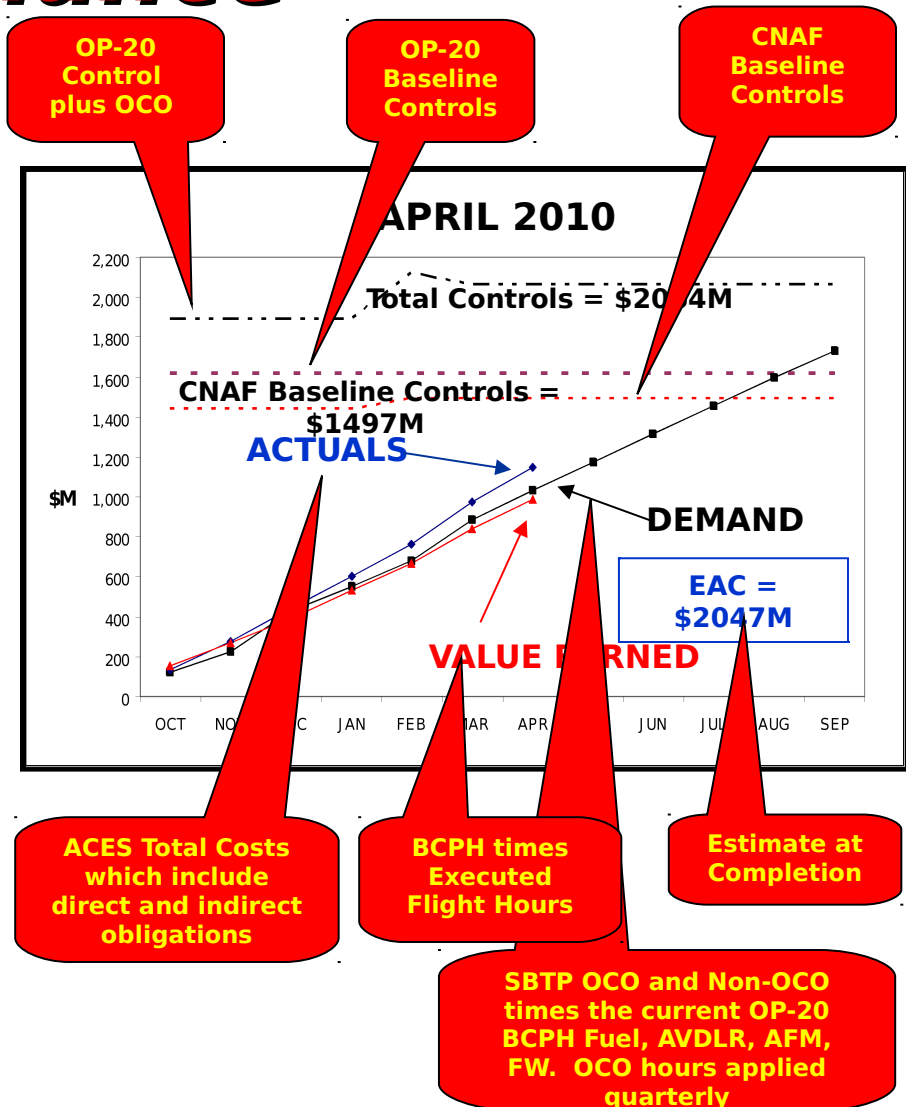
Chart Purpose: The panel provides an aggregate view of USMC cost performance.

Actual Cost: Is ACES Total Cost, which includes direct and indirect obligations.

Plan: Is Sortie Based Training Plan (USMC), which includes all COW and NON-COW, augments, times the current OP-20 BCPH for Fuel, AVDLR, AFM and FW (Contracts) categories. Augments received quarterly and applied monthly.

Earned Value: Is the OP-20 Budgeted Cost per Hour times Executed Flight Hours. This is also referred too as Should Cost.

$$\text{BCPH} \times \text{Executed FHrs} = \text{EV}$$

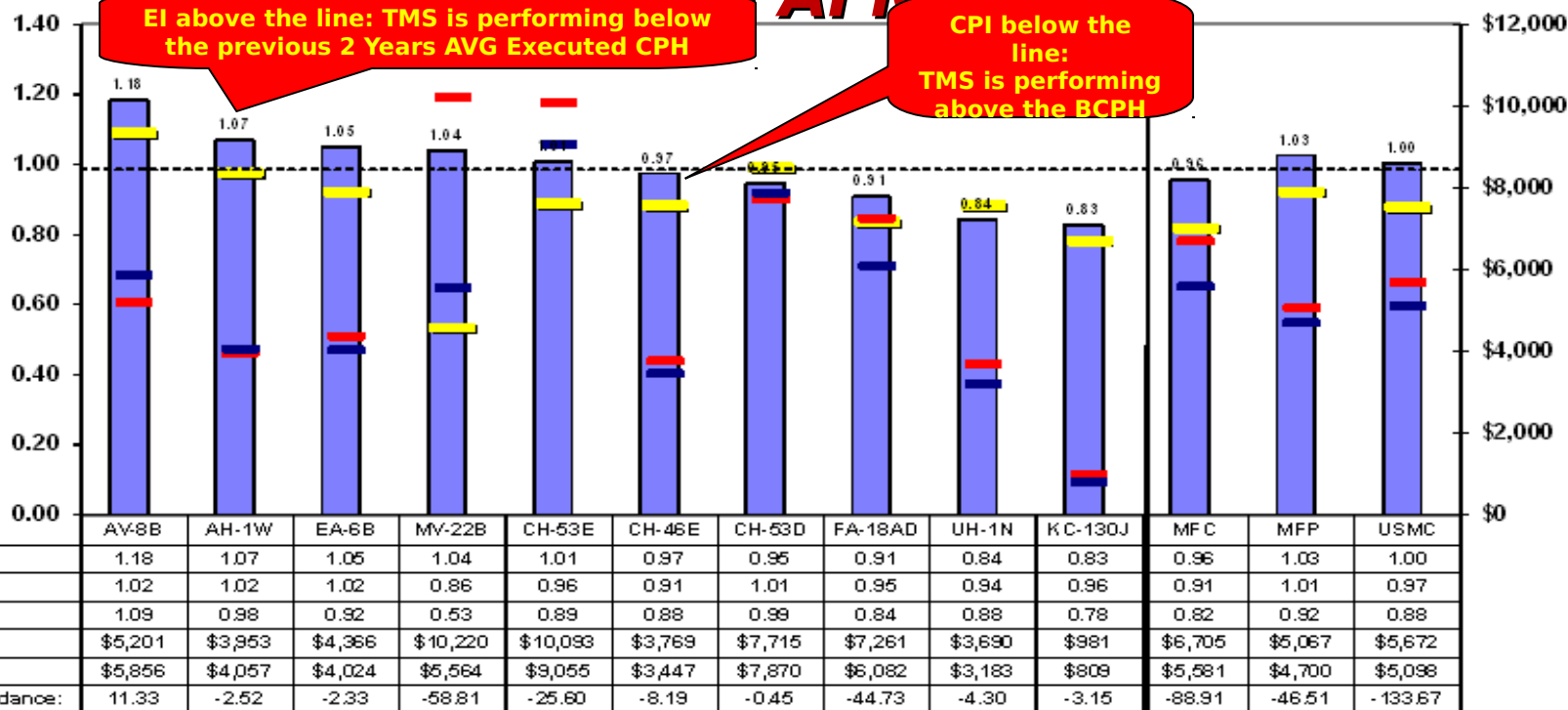




ACES Indices Cost Performance



(AVDLR and AFM)



Scheduled Performance Index (SPI): Is Earned Value divided by Planned Cost. Greater than 1.00 flying more than planned, less than 1.00 flying less than planned.

$$(BCPH \times \text{Executed FHrs}) / (BCPH \times \text{Planned FHrs}) = SPI$$

Cost Performance Index (CPI): Is Earned Value divided by Actual Cost. Greater than 1.00 costing less than budget (Under Budget), less than 1.00 costing more than budget (Over Budget).

Fuel obligations have been added to the CPI calculations.

$$(BCPH \times \text{Executed FHrs}) / \text{Actual Cost} = CPI$$

Execution Index (EI): Is the average of the previous 2FY AOM CPH (AVDLR & AFM) adjusted into current year dollars compared to the current FY. Greater than 1.00 spending less than previous FY, less than 1.00 spending more than previous FY.

Slide: 42



Critical Processes and Behaviors ***(Enterprise)***



- **Identify Domains and assign Single Process Owners**
- **Assemble the right Enterprise teams and gain commitment**
- **Operate in support of a Single Fleet-Driven Metric (*what the Enterprise values*)**
 - *Agreement on scope, outputs, and linked metrics*
 - *Transparency of data to promote trust and monitor performance*
 - *Shared knowledge on issues and key problems affecting the Domain*
 - *Recognize, nurture and respect technical authority*
 - *Identified entitlements (what's needed, when, how much, and no more)*
- **Agree on desired output (e.g., Readiness over Cost), with focus/ trade-space involving current and future readiness.**
- **Operate with discipline, governance, and a regular (timely) drumbeat.**
- **Baseline every dollar, all the people, all the stuff, and all the capability within the domain, with assigned accountability for outcomes**
- **Establish entitlements. Continually measure gaps-to-**



RBA/RFT Framework



Benefits of an RFT Construct:

- **MC/FMC measures gross levels of operational capability while RBA/RFT allows for increased granularity and fidelity**
 - o Improved visibility of MET and core skills capability.
 - o Aligns Maintenance and Supply Chain to optimize support.
 - o RBA isolates the “air vehicle” in order to provide visibility of the mission sets:
 - The more “basic” the RBA, the more granularity is provided on the mission sets
 - Un-like MC, RBA is a more accurate assessment of Launchable aircraft



RBA/RFT Framework



Benefits of an RBA/RFT Construct

- RBA/RFT improves the criteria for identifying gaps in aircraft material condition to support training and operational requirements:
 - o Flight Line gap
 - o RBA gap
 - o RFT gap



RBA/RFT Framework



Building RFT Set(s)

- **Ready Basic Mission Set(s) (RBM)**

- o Those common mission systems that are required to support training or employment of core skills in execution of all Mission Essential Tasks (MET) for each TMS

- Shipboard operations
- NVG operations

- **Ready MET Set(s) (RMS)**

- o Those systems, not already captured as RBA or RBM, that are required to support training or employment of a **particular** core skill in execution METs for each TMS

- Air to Air, Air-to-Surface



RBA/RFT Framework



Establish the equipment standards:

- TMS teams determine the requirements based upon the RBM/RMS definitions
- Based on phases of operational commitments:
 - o Deployed / Contingency (non-deployed)

Standards

AV-8B: 14 Plane Standard		
General		
Field	Standard	
Unit Name	VMA-211, 214, 311, 513, 223, 231, 542 or VMAT-203	
TEEP Event	Free Text: Enter by Month	
Type Month	Contingency	Deployed
T Rating	2	2
Sorties	Per CCRM/SBTP: Numeric: Enter by Month	
Training Hours	No Associated Standard	
Support Hours	No Associated Standard	
Operational Hours	No Associated Standard	
Contingency Hours	No Associated Standard	
Simulation Hours	Per CCRM/SBTP: Numeric: Enter by Month	
Total Hours	Per CCRM/SBTP: Numeric: Enter by Month	
Sorties/Crew/Month Flown	No Associated Standard	
Hours/Crew/Month Flown	No Associated Standard	
Simulation Hours/Crew/Month Flown	No Associated Standard	
Core Skills		
	Contingency	Deployed
FAM	16	16
AAR	16	16
LAT	15	15
AS	15	15
NS	15	15
AA	10	10
CAS	15	15
AR	15	15
SCAR	15	15
AAW	10	10
AI	14	14
FCLP (Dets Only)	N/A	N/A
FCLP (Night) (Dets Only)	N/A	N/A
CO (Dets Only)	N/A	N/A
CO (Night) (Dets Only)	N/A	N/A
Combat Leadership		
SEC LDR (Section Leader)	11	11
DIV LDR (Division Leader)	6	6
MSN CDR (Mission Commander)	3	3
COB		
Pilot Upper Limit	22	22
Pilot Lower Limit	21	21
Equipment		
Flightline Aircraft	14	14
Ready Basic Aircraft	10.5	10.5
Assigned Target Pods	7	14
Ready target Pods	5.25	10.5
Assigned DECM (ALQ)	7	14
Ready DECM (ALQ)	5.25	10.5
Assigned Tanks	28	28
Ready Tanks	21	21
Assigned Guns	14	14
Ready Guns	10.5	10.5



'Available Tools'

- **End-To- End (E2E)**

(MAG CO - Ownership; A/C Squadron CO - Engage / Collaborate; MALS CO - Support, Collaborate & Educate)

- o Component of Marine Aviation's Transformation Strategy
- o Achieves Reliable TMS Throughput by Aligning Processes and Optimizes Performance of Operations, Maintenance, Support, and Administrative Functions at:
 - Organizational Level
 - Intermediate Level
 - Depot Level
- o Provides TMS Leadership with Tools to Mitigate Shortfalls in Integrated Logistics Support Elements
- o Provides Necessary Analysis to Quantify Impact of Shortfalls

- **TMS Alignment Process (TAP)**

- o Aligns and Leverages Essential Cross-Command Interdependencies Into an Integrated TMS Strategy
- o Owned, Led and Executed by the TMS Team

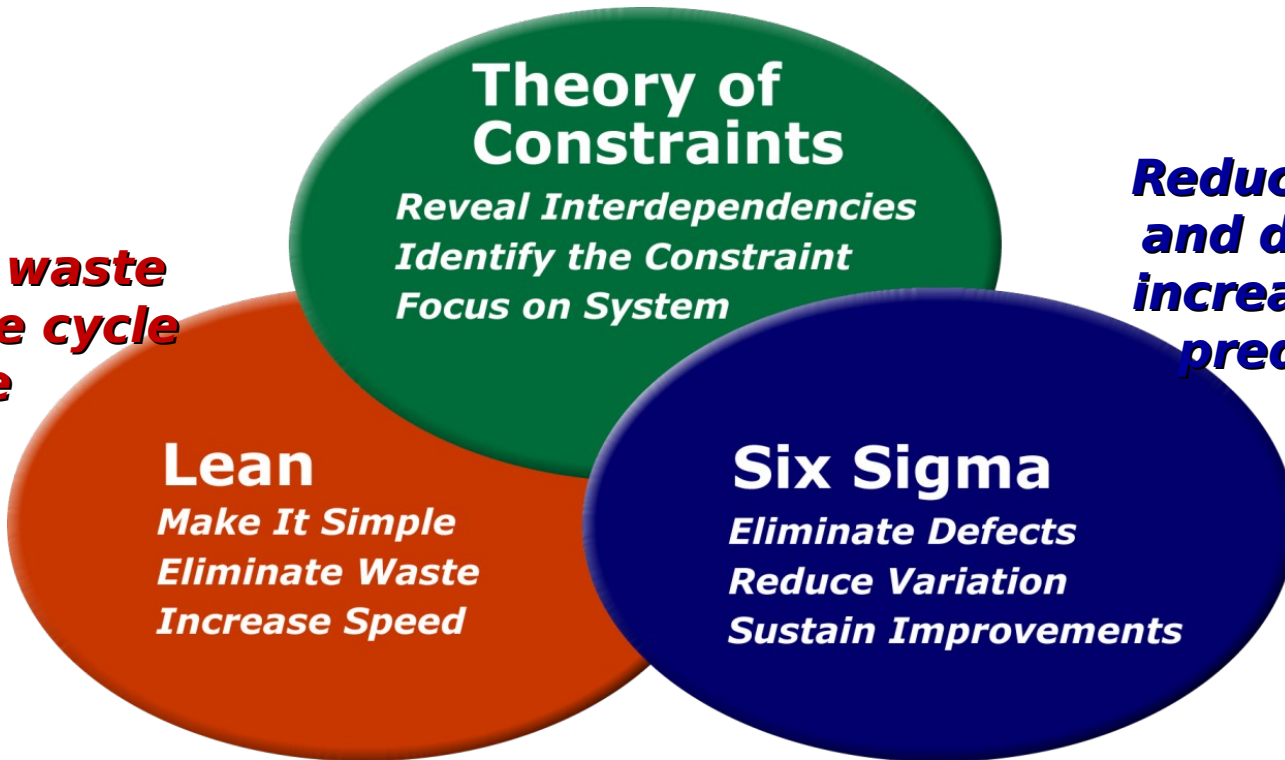


Marine Aviation Systems Integrated Solution



The Goal: Maximize Throughput

**Eliminate waste
and reduce cycle
time**

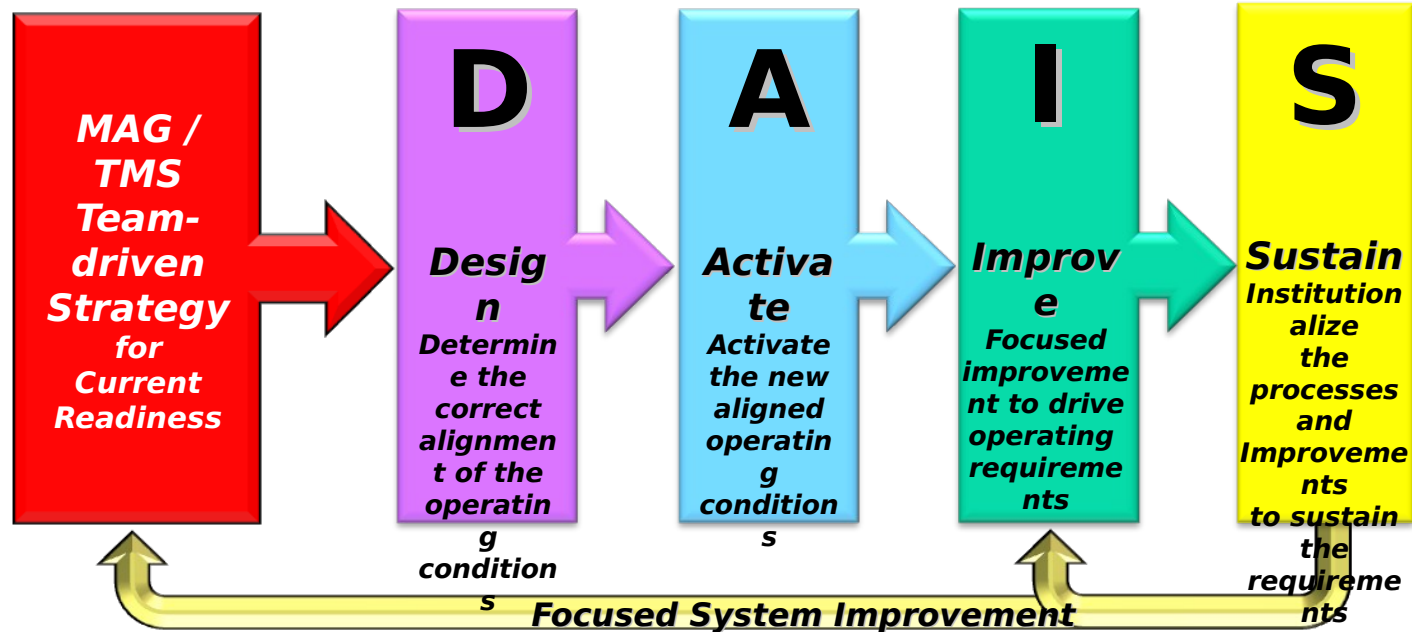


**Reduce variation
and defects and
increase process
predictability**

**Integrated and applied in a logistics chain environment as the
system enabler for CR**



Marine Aviation Systems Integrated Solution



DESIGN: Operational leaders and SMEs design their operations to align operating conditions to achieve the objectives of Current Readiness through End-to-End Design

IMPROVE: Analyze key measurement results to identify gaps between present and desired performance levels. Identify opportunities to focus improvement efforts and achieve desired outcomes, utilizing the most appropriate technologies and methods

ACTIVATE: Make the Design Operational. Operate more IAW the new operating conditions and achieve a more stable and predictable environment.

SUSTAIN: Work with MAW and MAG AIRSpeed resources to assess, address and institutionalize the policies, measurements and behaviors to guarantee the results are sustained from the MAG / TMS design and do not degrade



E2E Basics

- **E2E Alignment is Center Piece to the Success of Marine Aviation's Transformation Strategy**
 - **Focuses on What Inhibits Readiness**
 - **Examines Specific Process That Impact Sortie Generation at:**
 - **Aircrew Production**
 - **Flightline**
 - **Supporting Logistics Chain [Organizational - Intermediate - Depot (O-I-D)]**
- **Focused on TMS Throughput (Readiness Production / Top Five)**
- **Aligns Processes and Optimizes Performance at :**
 - **Organizational**
 - **Ops/Maintenance Interface, Aircrew Production Core, O-I Interface, Weapon System Availability and Reliability**
 - **Intermediate**
 - **Capability-Based Production, Reliable Replenishment of Mission Sets, Cost Gaps Analysis**
 - **Depot Levels/OEM**
 - **Induction of Retrograde Closely Aligned to Fleet Demand, Reliable Replenishment of Mission Sets**



E2E Basics

- **Provides Analysis Tools to:**
 - Quantify the Impact of Shortfalls
 - Manage Uncertainty
 - Assist in Root Cause Analysis
- **E2E Requires Paradigm Changes in Understanding**
 - RBA/RFT & FMC/MC and the Applications
 - RBA Increases tied to USMC Top 5
 - Generating Material Readiness: Focus on Repairables or Consumables
 - Transparency and Collaboration Crucial
- **E2E Requires Senior Leadership's Support in Word and Deed**

Expectation

An Operations - Maintenance Team with Cognitive Skills Needed to Perform Effective

Time / Resource Management, In An Environment Characterized by Uncertainty and Resource Constraints - Sustained Warfighting

E2E Starts With Squadron Ops and Maint; Ends With FRC's and OEM Vendors



CR & E2E Mutually Supportive

REPORTING
G
READINESS
DRRS

Operational & Training
Commitments
(TEEP)

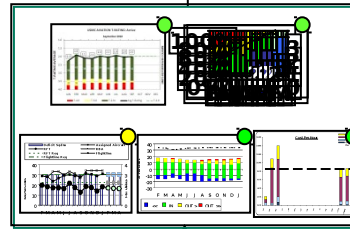
MET's

GOAL
**Core Capable
Unit**
Global Perspective

Community
Health
Unit Readiness
Goals vs. Actual
(Variance)

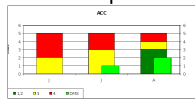
**FIXING
READINES
S
CR
Process**

USMC TOP 5 METRICS

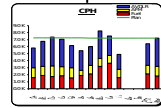


**CR
Identify
& Focus
on the
Gaps**

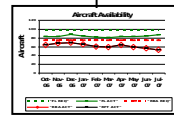
**E2E
Align
the
Mode of
Operations**



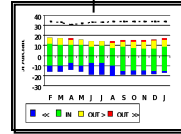
CMTL



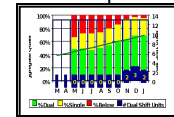
COST



RFT



AIRFRAME LCM



ALERTS

T&R

FLT LDRSHIP

**AIRCREW
CORE LEVELS**

**AIRCRAFT/
SYSTEMS**

**MAINTENANCE
CORE LEVELS**

M-SHARP/SBTP
sourced
Drill Downs

AFAST sourced
Drill Downs

M&SCM sourced
Drill Downs

ASM sourced
Drill Downs

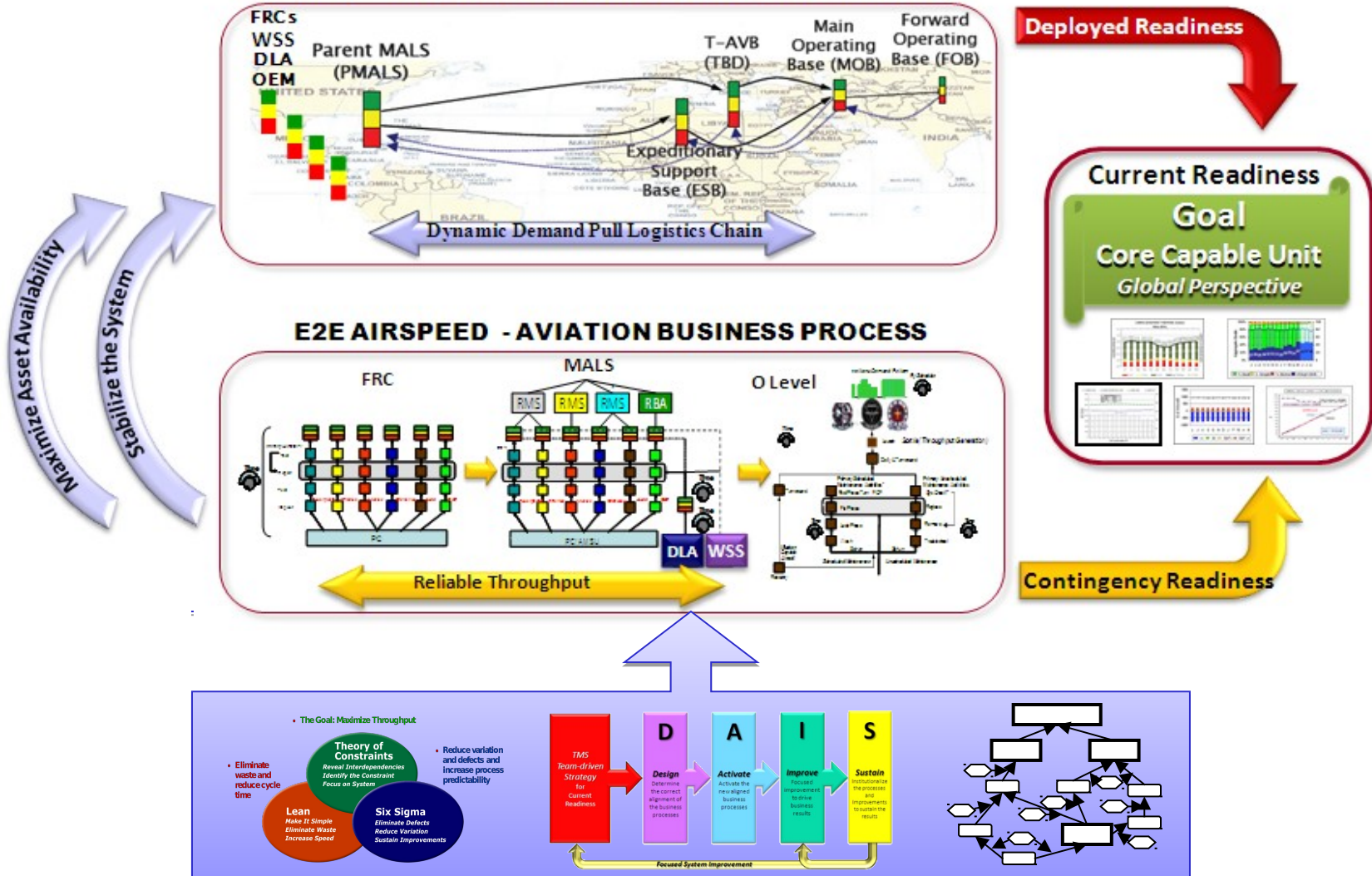


Marine Aviation Systems



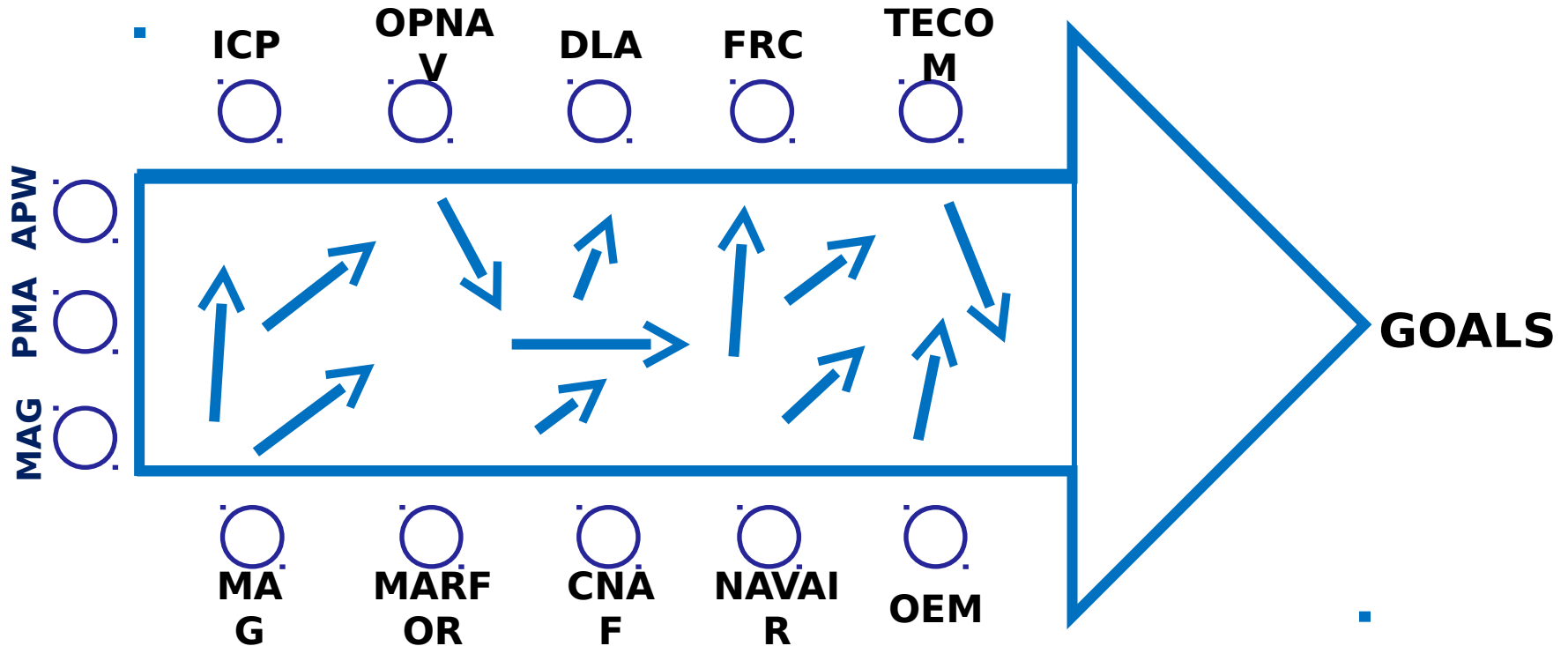
Where are we doing?

MALSP II - E2E AIRSpeed EXPEDITIONARY EXTENSION



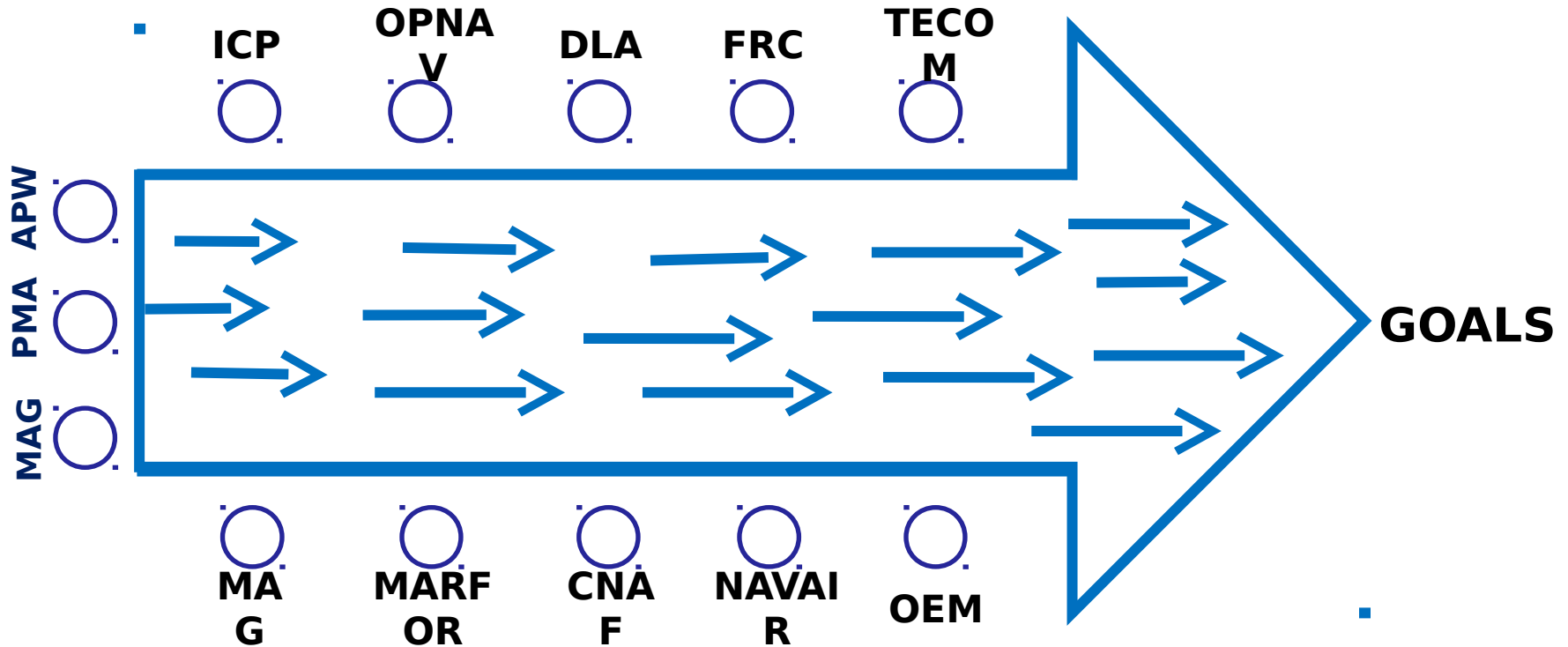


'Before TMS Alignment'





'After TMS Alignment'





Summary

- Understand the Big Picture
 - **Aviation Plan**
 - **Navy**
 - **Money**
 - **Resources**
- Understand Your Role
 - **Systematically Resource MAG**
- Understand the TMS Role to Achieve Maximum ROI
- Stay Engaged

Take the Enterprise Approach



Points of Contact

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Right Force, Right Readiness, Right Time

Fight & Train Now...

Posture For The Future....

Questions ?

www.public.navy.mil/airfor/nae/

New





Back- Up





CR Improvement Program

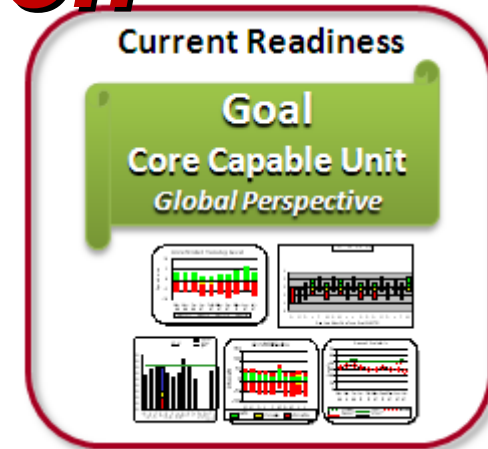
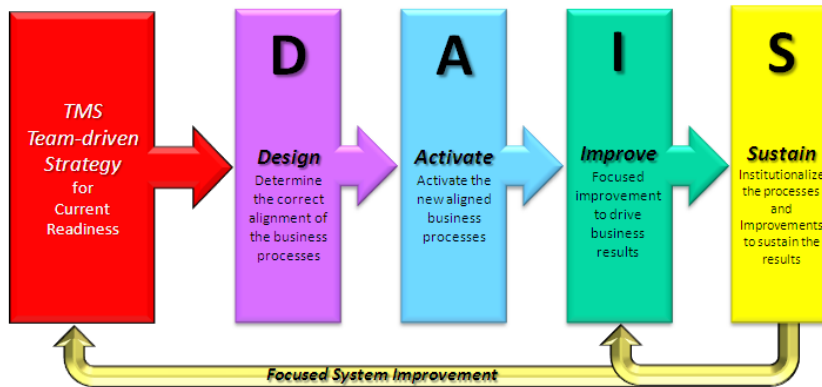


- **Objectives**

- o Support Title 10 Responsibilities in Support of Aviation Forces
 - Properly Manned
 - Fully Trained and Supported
 - Well Maintained
- o Fund and Resource Marine Aviation Platforms and Systems
 - Accurately Assess and Manage Cost and Resource Drivers
- o Apply Consistent and Integrated Metrics
 - Operations, Training, Logistics, Resource Utilization
 - Systematic Interrelationships of Elements Which Impact Readiness
- o Employ TMS Teams to Optimally Manage Effectiveness of Marine Aviation
- o Apply Optimum and Disciplined Management of A/C to Accomplish Programmed Service and Operating Life
- o Connect Logistics Providers Chains to Unit Readiness
- o Increase System Linkage and Clarity Measured by MET-Based Readiness



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